REMARKS

The Applicant has now had an opportunity to carefully consider the comments set forth in the Office Action mailed February 8, 2007. Acknowledgement of allowable subject matter in claims 20 and 21 is noted with appreciation. Nevertheless, the rejections of claims 1-3, 7, 9, 11-15 and 18-20 are respectfully traversed.

The Office Action

In the Office Action mailed February 8, 2007:

claims 20 and 21 were allowed;

a response to arguments presented in Applicant's Amendment D was provided; claim 7 was rejected for lack of antecedent basis for the word –establishing--;

claims 1, 3, 6, 7, 12-15 and 17-19 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,501,556 to Nishii ("Nishii");

claims 2 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nishii in view of Japanese Published Application No. JP 07-307827 by Nakajima Toru ("Toru"); and

claims 9 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nishii in view of U.S. Patent No. 5, 550,614 to Motoyama ("Motoyama").

Reply to Response to Arguments

Section 2 of the Detailed Action explains that the Examiner continues to disagree with the assertion of the Applicants that Nishii does not suggest removing blank pages from main print job image input data and relies on the Abstract of Nishii, lines 3-7, for support of the contrary position. However, the Abstract of Nishii describes "an image forming apparatus has a normal print mode in which input image data for a plurality of pages are processed into images on the same number of pages of paper, and a trial print mode in which input image data are processed into minified images on fewer pages of the paper for trial output such that a user can check an output result to be obtained in the normal mode beforehand. In the trial mode, a blank page detector detects a blank page from the input image data, and an image data minifier converts the image data stored in an image data buffer into minified image data and stores the

data in a second buffer. Then, a plotting section develops the minified image data read from the second data buffer into a plotting pattern, which is then written to a page buffer. In an output section, the plotting pattern read from the page buffer is processed into a visible image. At this time, an image corresponding to the blank page detected by the blank page detector is not formed."

It is respectfully submitted that the Abstract of Nishii does not disclose or suggest that blank pages are removed during a normal print mode. Instead, the Abstract of Nishii describes a detector detecting a blank page during trial print mode and that during the trial print mode, an image corresponding to the blank page detected by the blank page detector is not formed. Furthermore, the Abstract of Nishii does not disclose or suggest that blank pages are erased. Instead, the Abstract simply indicates that a minified version of a blank page is not produced. It is respectfully submitted that any interpretation of Nishii as disclosing erasing blank pages from input data or removing blank pages from main job input data can only be based on information gleaned from the present application. Accordingly, such an interpretation of Nishii is based on impermissible hindsight reasoning and otherwise represents a clear error of the Office Actions.

Section 3 of the Detailed Action responds to arguments related to **claim 3**. **Claim 3** recites the method of claim 1 further comprising: requesting permission from a user to remove the identified pages.

The response to arguments asserts that column 5, lines 1-10 explain that the printer of Nishii has a control panel and asserts that if no key on the control panel is activated, then no operation will be performed. However, Nishii does not disclose or suggest a request for permission or that permission to remove identified pages is requested of a user via a control panel. It is respectfully submitted that many devices found in the home or office include control panels. However, discussion of such control panels does not disclose or suggest requesting permission from a user to remove an identified page. Accordingly, it is respectfully submitted that any motivation to interpret the discussion of a control panel found at column 5, lines 1-10, of Nishii as suggesting requesting permission from a user to remove an identified page could only have been gleaned from a review of the present application and is, therefore, based on impermissible hindsight. Accordingly, the assertions of Section 3 of the Detailed

Action represent **clear errors** of the Office Action.

Section 4 of the Detailed Action is directed toward arguments related to claims 2, 9, 11 and 19. Section 4 indicates that the Examiner disagrees with the assertion that Toru does not suggest notifying an operator that an unwanted portion has been located. By way of explanation, Section 4 asserts that Toru teaches of notifying a user of a blank page and directs the attention of the Applicant to paragraph 28 in support of the assertion. However, claim 2 recites notifying an operator in response to detecting data representative of the characteristic. The characteristic in question is the characteristic established in **claim 1** of a page indicative of an unwanted page. Paragraph 28 of Toru discusses "an invalid manuscript discernment means to identify whether the received image data is a blank paper and an advice means of an invalid manuscript to notice by a user of a manuscript being a blank paper." Paragraph 29 indicates that "when the blank paper has been sent continuously, I hear that possibility that the manuscript, transmission, is table back reverse is high, and he leaves decision whether it receives continuously henceforth or it does not carry out to the user of a receiving side." Accordingly, it is respectfully submitted that paragraphs 28 and 29 describe a system wherein a user is notified that it appears that a manuscript being received is blank. That is, for example, an error has occurred on the transmission side such as, for example, the wrong side of the manuscript has been scanned. Accordingly, as explained in paragraph 13 of Toru, "when it is judged that there is not contrast, a user performs adjustment of reading sensibility, etc., and reads again." Accordingly, Toru does not disclose or suggest notifying an operator in response to detecting data representative of the characteristic of an unwanted page in an input stream of a printing system main print job as recited in claim 2 or notifying an operator that a potentially unwanted portion has been located as recited in claim 11 or the image destination recited in claim 19. Even if Toru discusses embodiments of the system of Toru that involve a fax receiver, Toru does not disclose or suggest the printing system of claim 13 comprising a pattern detector operative to receive an arbitrary description of an unwanted portion of the main print job image data, search for a portion of the main print job input image data that corresponds to the unwanted portion description and relate information about a found portion that corresponds to the description and a portion deleter operative receive information from the

pattern detector regarding a location of the at least one unwanted <u>portion</u> of the main print job input image data and to remove the at least one unwanted <u>portion</u> of the main print job input image data to generate main print job output image data, as recited in **claim 13**, from which **claim 19** ultimately depends.

Section 4 of the Detailed Action also asserts that the Examiner disagrees with the assertions of the Applicant that Motoyama does not disclose using pattern recognition techniques to search for matching characteristics and that Motovama does not search for characteristics matching an arbitrary description. In support of the contrary position, the Office Action makes reference to the black dot comparator 142 and image data signal 126 of Motoyama and the detection of non-blank pages mentioned in column 7, lines 14-30, of Motoyama. However, the cited portion of column 7, discusses the detection of blank and non-blank pages. The cited portion of column 7 does not disclose or suggest using pattern recognition techniques to search for characteristics indicative of an unwanted page as recited in claim 9 or the pattern detector operative to receive an arbitrary description of an unwanted portion of a main print job image data and to search for a portion of the main job input image data that corresponds to the unwanted portion description. It is respectfully submitted that the discussion of detecting blank and unblank pages in the cited portion of Motoyama is not a discussion of either an arbitrary description of an unwanted portion or of using pattern recognition techniques.

For at least the foregoing reasons, it is respectfully submitted that Section 4 of the Detailed Action represents **clear errors** of the Office Action.

The Claims Comply with 35 U.S.C. §112

Claim 7 was rejected for having insufficient antecedent basis for the phrase "establishing the characteristic comprises describing a characteristic of a non-blank separator sheet."

However, **claim 7** has been amended to recite --describing characteristics comprises describing a characteristic of a non-blank separator sheet--. It is respectfully submitted that **claim 7** depends from **claim 12** which provides sufficient antecedent basis for the phrase --describing characteristics--.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §112, second paragraph, is respectfully requested.

The Claims are not Anticipated

Claims 1, 3, 6, 7, 12-15 and 17-20 were rejected under 35 U.S.C. 102(e) as being anticipated by Nishii.

In explaining these rejections, the Office Action repeats the reasoning presented with regard to claims 1, 3, 6, 7, 12-15 and 17-20 provided in the Office Action that was mailed August 9, 2006. In this regard, the attention of the Office is directed to the arguments presented in support of the claims found on pages 10-16 of Applicant's Amendment D as well as the Reply to Response to Arguments found on pages 6-10 of that document and the Response to Arguments provided hereinabove and the comments below.

Briefly, independent **claim 1** recites *inter alia*: establishing a characteristic of a page indicative of an unwanted page, identifying one or more pages of the main print job that contain data representative of the characteristic and removing the identified pages thereby excluding them from the main print job output stream. It is respectfully submitted Nishii discloses a trial print mode wherein a blank page detector detects a blank page from the input image data, and an image data minifier converts the image data stored in an image data buffer into minified image data and stores the data in a second buffer. Then, a plotting section develops the minified image data read from the second data buffer into a plotting pattern, which is then written to a page buffer. In an output section, the plotting pattern read from the page buffer is processed into a visible image. At this time, an image corresponding to the blank page detected by the blank page detector is not formed (Abstract).

Accordingly, Nishii discloses removing blank pages from minified image data and does not disclose or suggest removing the identified pages thereby excluding them from the **main print job** output stream as recited in **claim 1**.

Further in regard to **claim 1**, it is respectfully submitted that the cited portions of column 5 of Nishii discuss a control panel and said <u>trial print mode</u>. The blank page detector discussed in the cited portion of column 2 is for detecting blank pages during <u>the trial print mode</u>. The cited portions of column 6 and 7 are also directed toward <u>the trial print mode</u>. For example, the cited portion of column 7 makes reference to an erasure that occurs at step S207 (see FIG. 5). It is respectfully submitted that S207 occurs when the system of Nishii is <u>in a trial</u>

print mode (S201). Nishii does not disclose or suggest that blank pages removed from trial print mode data are also removed from normal print mode data or main print job output. Accordingly, the assertions of the Office Action in this regard represent **clear errors** of the Office Action and **claim 1**, as well as **claims 2** and **3**, which depend therefrom, is not anticipated in light of Nishii.

Claim 12 recites *inter alia*: describing characteristics of the unwanted portions of the main job, searching within the input image data for portions of the main job that have the described characteristics, locating a portion of the main job input data that has the described characteristics, deleting the located portion from the main job input data to generate main job output data and delivering the main job output data to the output stream. Arguments similar to those submitted above with respect to **claim 1** are submitted in support of **claim 12**, as well as **claims 7** and **9**, which depend therefrom.

Additionally, claim 7 has been amended to recite the method of claim 12 wherein the step of describing the characteristics comprises describing a characteristic of non-blank separator sheet. The Office Action indicates that claim 20 is allowable and notes that the prior art fails to disclose a printing system to automatically exclude unwanted non-blank pages of a job from a main job output stream comprising means for describing one or more characteristics of a non-blank page that is unwanted. It is respectfully submitted that claim 7 is allowable for at least reasons similar to the reasons claim 20 is allowable.

Independent claim 13 recites inter alia: a pattern detector operative to receive an <u>arbitrary</u> description of an unwanted portion of the main print job input image data, search for a portion of the main print job image data that corresponds to the unwanted portion description, and relate information about a found portion that corresponds to the description and a portion deleter operative to receive information from the pattern detector regarding a location of the at least one unwanted portion of the main print job input image data and to remove the at least one unwanted portion of the main print job input image data to generate main print job output image data.

Arguments similar to those submitted in support of **claim 1** are submitted in support of **claim 13**. Nishii does not disclose or suggest operations related to main print job output image data. Furthermore, Nishii does not disclose or suggest a pattern detector operative to receive an <u>arbitrary</u> description of an

unwanted portion of a main print job or further processing as recited in **claim 13** associated with such an <u>arbitrary</u> description. Nishii only discusses blank pages (and then only in the context of minified images) and does not disclose or suggest receiving descriptions of, for example, unwanted banner pages or other separator sheets. Accordingly, Nishii does not disclose or suggest receiving <u>an arbitrary</u> description of an unwanted portion, searching for portions that correspond to the description and removing portions found in such a search.

For at least the foregoing additional reasons, **claim 13**, as well as **claims 14**, **15**, **18** and **19**, which depend therefrom, is not anticipated by Nishii.

The Claims are not Obvious

Claims 2 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nishii in view of Nakajima Toru.

Claim 2 depends from claim 1 and is patentably distinct for at least that reason. Additionally, claim 2 recites notifying an operator in response to detecting data representative of the characteristic (i.e., the characteristic of an unwanted page). The Office Action stipulates that Nishii fails to disclose notifying an operator of such detected data and relies on Nakajima Toru for this disclosure. However, Nakajima Toru does not disclose or suggest notifying the user of detecting data representative of the characteristic of an unwanted page to be removed from an output stream. Instead, it is respectfully submitted Nakajima Toru notifies the operator of some problem with the input image data (i.e., invalid). For example, pages to be scanned may have been placed in the scanner upside down or a brightness or contrast setting may not be set properly (e.g., see paragraph 13).

For at least the foregoing reasons, **claim 2** is not obvious in light of Nishii and Nakajima Toru taken alone or in any combination.

Claim 11 recites a method operative to semi-automatically exclude unwanted portions of a main job from a main job output stream of a printing system including *inter alia*: accepting one of an authorization and prohibition from an operator to remove a potentially unwanted portion, determining that the potentially unwanted portion is an unwanted portion if the authorization is accepted and removing the unwanted portion from the main job input stream, thereby excluding the unwanted portion from the main job output stream.

In this regard, arguments similar to those submitted in support of claims 1, 12 and 13 are submitted in support of claim 11. Additionally, the Office Action stipulates that Nishii fails to disclose notifying an operator that an unwanted portion has been located and relies on Nakajima Toru for such disclosure. However, Nakajima Toru does not notify an operator that an unwanted portion has been located. Instead, Nakajima Toru notifies a user of invalid data in an input stream thereby allowing a "user to perform adjustment of reading sensibility, etc.", and reads again (paragraph 13).

For at least the foregoing reasons, **claim 11** is not obvious in light of Nishii and Nakajima Toru taken alone or in any combination. Additionally, it is respectfully submitted that the Office Action has not met its burden for presenting a case of *prima facie* obviousness.

It is respectfully submitted that the motivation for combining Nishii and Nakajima Toru suggested by the Office Action is specious. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination (MPEP 2143.01(III)). Nishii does not disclose or suggest that a user could or should be notified when a characteristic is detected. Nakajima Toru notifies an operator that invalid data has been detected so that pages can be reoriented and rescanned or so that sensitivities can be adjusted and pages rescanned (paragraph 13). Nishii and Nakajima Toru do not disclose or suggest notifying a user that a characteristic of an unwanted page or document portion has been detected so that the user or operator can authorize or prohibit the removal of that portion from input image data, thereby removing it from an output stream.

Furthermore, it is respectfully submitted that any motivation to make the combination of Nishii and Nakajima Toru could only have been found in the present application. Therefore, the rejection of **claims 2** and **11** is based on impermissible hindsight and, for this additional reason, the Office Action has not met its burden for presenting a case of *prima facie* obviousness.

Claims 9 and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nishii in view of Motoyama. However, even if the assertions of the Office Action with regard to the disclosure of Nishii are correct, <u>Motoyama</u> teaches away from removing blank pages from within the middle of a

reproduction job by declaring that it is an objective of Motoyama to provide a system that **permits** a blank page within the middle of a reproduction job to print normally (column 2, lines 1-10). Since Motoyama teaches away from removing blank pages, one of ordinary skill in the art would not look to Motoyama to solve the problem of unwanted pages. Therefore, it would not be obvious to combine disclosure of Motoyama with any other document to solve the problem of unwanted pages. For at least the foregoing reason, **claims 9** and **19** are not anticipated and are not obvious in light of Nishii and Motoyama taken alone or in any combination.

Additionally, **claims 9** and **19** depend from **claims 12** and **13**, respectively, and are patentably distinct for at least those reasons.

Furthermore, **claim 9** recites searching within input image data comprises using pattern recognition techniques to search for matching characteristics. <u>The Office Action stipulates that Nishii fails to disclose searching within an input image data comprises using pattern recognition techniques and relies on Motoyama for this disclosure. Additionally, the Office Action asserts that <u>the Applicant is correct in asserting that Motoyama does not recognize patterns</u> (section 6, page 3, of the Office Action of March 17, 2006).</u>

For at least the foregoing reasons, **claim 9** is not anticipated and is not obvious in light of Nishii and Motoyama taken alone or in any combination.

Additionally, it is respectfully submitted that the Office Action does not meet its burden for presenting its case of *prima facie* obviousness. The Office Action asserts that Nishii could have easily been modified to scan a page and compare a digital page data to a black spot threshold of Motoyama. However, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination (MPEP 2143.01(III)). It is respectfully submitted that there is no motivation in the art to modify Nishii according to the black spot threshold of Motoyama other than some motivation that might be provided by the present application. Therefore, the rejection of claim 9 can only be based on impermissible hindsight.

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<u>Telephone Interview</u>

In the interests of advancing this application to issue, the Applicants respectfully request that the Examiner telephone the undersigned to discuss the foregoing or any suggestions that the Examiner may have to place the case in condition for allowance.

CONCLUSION

Claims 1-3, 7, 9, 11-15, 18-21 remain in the application. Claim 7 has been amended to correct antecedence. For at least the foregoing reasons, the application is in condition for allowance. Accordingly, an early indication thereof is respectfully requested.

Respectfully submitted,

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